

CONTRACT BETWEEN
THE UNITED STATES DEPARTMENT OF ENERGY
AND CENTRAL RESEARCH INSTITUTE OF
ELECTRIC POWER INDUSTRY OF JAPAN
FOR A JOINT PROGRAM ON IFR TECHNOLOGY

Central Research Institute of Electric Power Industry (CRIEPI), a corporation organized and existing under the laws of Japan and having a place of business at 1-6-1 Otemachi, Chiyoda-ku, Tokyo 100, Japan, and the United States Department of Energy (DOE), an agency of the Government of the United States, hereinafter referred to as "The Parties," herein agree to enter into a Contract.

WITNESSETH THAT:

WHEREAS, the Governments of the United States and Japan have agreed to cooperate on peaceful uses of nuclear energy, and

WHEREAS, The United States and Japan share an interest in the development and commercialization of advanced liquid metal reactors for use in commercial electric power generation to meet their respective long-term energy needs, and

WHEREAS, while each country may independently choose its path for liquid metal reactor development, a strong rationale exists for cooperation and exchange on emerging technologies, and

WHEREAS, in recent years, the DOE advanced Reactor R&D effort focused on the Integral Fast Reactor (IFR) technology because it offers greater promise in inherent passive safety and cost-efficient fuel cycle closure, and

WHEREAS, in recent years, CRIEPI has independently been carrying out a development of FBR cycle using metal fuels, and

WHEREAS, CRIEPI is desirous of entering into a joint program with DOE to allow CRIEPI's participation in the ongoing DOE IFR Pyroprocess Development program so that CRIEPI can make an independent assessment of the potential offered by this new technology;

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

Article 1. OBJECTIVE

The objective of this Contract (hereinafter referred to as the "Contract") is for DOE, through its Management and Operating Contractor, the Argonne National Laboratory (ANL), to facilitate CRIEPI's participation of DOE's ongoing Pyroprocessing Development element of its Integral Fast Reactor (IFR) Program currently being performed at Argonne National Laboratory-East, Argonne, Illinois.

Article 2. PROGRAM

The program of collaboration under this Contract is as described in Attachment 1, Statement of Work, which is attached hereto and made part of this Contract.

Article 3. DESIGNATED PRINCIPAL TECHNICAL COORDINATOR

Designated Principal Technical Coordinators shall be named by DOE and CRIEPI; these coordinators will be points of contact for all technical matters under this Contract. The Designated Principal Technical Coordinator for DOE is the General Manager, IFR Program at the Argonne National Laboratory, and the Designated Principal Technical Coordinator for CRIEPI is the Director of Fast Breeder Reactor Project.

Article 4. FINANCE

4.1 In support of the IFR Pyroprocessing Development technology exchange, CRIEPI shall make cash contributions to DOE, in US dollars as follows:

The first payment	Within 30 days after execution of this Contract	\$ 2,000,000
The second payment	October 1, 1989	\$ 2,000,000
The third payment	May 1, 1990	\$ 2,000,000
The fourth payment	October 1, 1990	\$ 2,000,000
The fifth payment	May 1, 1991	\$ 2,000,000
The sixth payment	October 1, 1991	\$ 2,000,000
The seventh payment	May 1, 1992	\$ 2,000,000
The eighth payment	October 1, 1992	\$ 2,000,000

The ninth payment	May 1, 1993	\$ 2,000,000
The tenth payment	October 1, 1993	\$ 1,800,000
The eleventh payment	Delivery of final report	\$ 200,000
Total Payments		<u>\$20,000,000</u>

4.2 DOE will provide to CRIEPI an invoice for each payment listed above. All payments shall be made to the account designated by DOE within thirty (30) days after receipt of the invoice or the due date specified above, whichever occurs later.

4.3 DOE will provide to CRIEPI on or before June 1st of 1990, 1991, 1992, 1993, and 1994 a report of the total expenditures of CRIEPI's last two payments and a summary of the deliverables during that period.

Article 5. PARTICIPATION

DOE may request CRIEPI to allow representatives from agencies and departments of the Government of the United States, DOE's prime contractors, subcontractors and/or licensees; and/or reactor manufacturers and/or utilities in the United States to participate in the discussions and meetings arranged under this Contract. Likewise, CRIEPI may request DOE to allow representatives from agencies and departments of the Government of Japan; CRIEPI's prime contractors, subcontractors and/or licensees, and/or reactor manufacturers and/or utilities in Japan to participate in the discussions and meetings arranged under this Contract. When a request to allow participation by such participants (hereinafter, the Participants) is made by either Party, the Parties shall consult each other in good faith and decide whether to allow such participation. Each of the Parties shall be responsible for ensuring that the Participants shall follow the laws and regulations of the United States and Japan, as appropriate, and the terms and conditions of this Contract.

Article 6. JOINT PROGRAM

Under this Contract, CRIEPI shall have access to the IFR Pyroprocess Development program as defined and set forth in Attachment 1, for the duration of the joint program. All IFR program direction, control and guidance, including

that for specific pyroprocess development tasks, shall remain the responsibility of DOE.

Article 7. DISCLOSURE OF TECHNICAL INFORMATION

Disclosure of technical information developed and included in reports under this Contract may take the form of joint publications or individual publications. In the event CRIEPI wishes to publish such technical information, it shall advise DOE of its desire to publish no less than ninety (90) days in advance of such publication and provide at the same time an advance copy of the proposed publication for editorial review. DOE shall review the proposed publication and advise CRIEPI of approval or disapproval within sixty (60) days of receipt of the advance copy. If DOE disapproves publication, and its explanation is deemed unsatisfactory, the matter shall be promptly discussed by the designated Principal Technical Coordinators for this Contract. The terms of this Article 7 shall not apply to information otherwise available in the open literature. Additionally, to the extent required by U.S. Federal law and regulations, CRIEPI shall not disseminate any information received under this Contract to third-party countries or to the general public without the express written approval, on a case-by-case basis, of DOE.

Article 8. PROPRIETARY DATA

No proprietary data shall be furnished, exchanged or transferred under this Contract. "Proprietary Data" means data developed prior to or outside of this Contract that embody trade secrets developed at private expense, such as design procedures or techniques, chemical composition of materials, or manufacturing methods, processes, or treatments, including minor modifications thereof, provided that such data: (i) are not generally known or available from other sources without obligations concerning their confidentiality; (ii) have not been made available by the owner to others without obligation concerning their confidentiality; and (iii) are not already available to the Parties without obligation concerning their confidentiality.

Article 9. COPYRIGHTED MATERIAL

9.1 CRIEPI shall not, without prior written authorization of DOE, establish a claim to statutory copyright in any data first produced in the performance of this Contract. To the extent such authorization is granted,

DOE reserves for itself and others acting on its behalf a royalty-free, nonexclusive, irrevocable, world-wide license to publish, distribute, translate, duplicate, exhibit, prepare derivative works and perform any such copyrighted data and to permit others to do so.

9.2 To the extent DOE has the right to grant such rights without incurring any obligations to third parties, DOE grants CRIEPI a nonexclusive license to use copyrighted materials delivered under this Contract only in Japan. However, CRIEPI may distribute copies of such materials for the term of this agreement to its related Japanese organizations for such parties' use only in Japan, provided CRIEPI maintains sufficient control over such materials to insure such parties only use the materials in Japan and do not copy or permit others to copy the materials, and will, upon DOE's request, provide DOE with a written accounting for all such materials and copies thereof identifying the recipient and current location of all such materials and copies. Thereafter, CRIEPI may make additional copies of such materials with the written prior consent of DOE on a case by case basis which will not be unreasonably withheld.

Article 10. PATENT RIGHTS

Rights to inventions by employees of the Argonne National Laboratory shall be governed by the terms of the University of Chicago's operating contract for the Laboratory. Rights to inventions conceived or first actually reduced to practice in the course of or under this Contract by CRIEPI employees or employees of its related Japanese organizations shall be as set forth in Attachment 4. Unless otherwise authorized by the Contracting Officer, CRIEPI will not subcontract research, development or demonstration work under this Contract.

Article 11. ADVERSE PATENT AND COPYRIGHT CLAIMS

In the event of any claim or suit against either Party on account of any alleged patent or copyright infringement arising out of the performance of this Contract or out of the use of any supplies furnished or work or services performed hereunder, either Party shall furnish to the other upon request, all evidence and information in their possession pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the requesting Party except where the Party has agreed to indemnify the other.

Article 12. TERMINATION OF CONTRACT

12.1 Either Party may terminate this Contract by delivering a written notice of such termination to the other Party at least 180 days prior to the effective date of termination. Notwithstanding the foregoing, DOE, by delivery of written notice of termination to CRIEPI, may terminate this Contract if the IFR Program at ANL is canceled, terminated or suspended by DOE for any reason whatsoever, or if CRIEPI fails to make payments pursuant to the schedule set forth in Article 4. In this latter event, DOE's termination of this Contract may be immediate with an effective date commensurate with the date of delivery of the notice to CRIEPI and the 180 day advanced notice provision set forth in the first sentence shall not apply.

12.2 Regardless of which Party terminates the Contract as set forth above, CRIEPI shall not be relieved of its obligations to make any payments due, as prescribed in the schedule of payments in Article 4, prior to the effective date of termination. However, CRIEPI will not be liable to make any payments scheduled on or subsequent to the effective date of termination. In the event of any such termination, CRIEPI shall not be entitled to any refund, rebate, and/or reduction with respect to any payment scheduled, pursuant to Article 4 of the Contract, prior to date of delivery of the notice of termination. With respect to the payment scheduled subsequent to the date of delivery of any such notice of termination, CRIEPI will be entitled to a refund for that portion of such subsequent payment which has not been expended in the performance of this Contract.

12.3 In the event this Contract is terminated by either Party, DOE shall provide a final report covering the results of work subsequent to previous reports.

Article 13. MODIFICATION OF CONTRACT

CRIEPI and DOE may mutually agree to modify or extend this Contract, including Attachment 1, or to add and to modify future Statements of Work or amendments hereto (hereinafter called "Future Attachments"). Such modifications or amendments shall be made in writing and signed by the DOE Contracting Officer and by a duly authorized officer or representative of CRIEPI.

Article 14. TERM

This Contract shall enter into force upon signature by the Parties hereto and terminate no later than March 31, 1994, unless extended by mutual agreement and documented in the form of a written modification to the Contract.

Article 15. DISPUTES

Any dispute between DOE and CRIEPI concerning the application or interpretation of this Contract shall be settled by the Parties through mutual agreement. If mutual agreement cannot be reached, disputes shall be settled in accordance with U.S. Federal law.

Article 16. APPLICABLE LAWS

The Federal laws of the United States of America shall apply to any and all matters relating to this Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be executed by their duly authorized representatives.

U.S. DEPARTMENT OF ENERGY
CHICAGO OPERATIONS OFFICE

By: 
Hilary J. Rauch

Title: Manager
Chicago Operations Office
(Contracting Officer)

Date: JUN 16 1989

CENTRAL RESEARCH INSTITUTE
OF ELECTRIC POWER INDUSTRY

By: 
Tadashi Nagakura

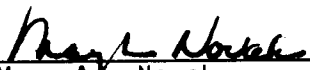
Title: Senior Vice President

Date: July 7, 1989

Enclosures:

- Attachment 1: Statement of Work
- Attachment 2: IFR Program Work Breakdown Structure
- Attachment 3: Major Milestones for Pyroprocess Development
- Attachment 4: Patent Rights

U.S. DEPARTMENT OF ENERGY
HEADQUARTERS

By: 
Mary Ann Novak

Title: Acting Assistant Secretary
for Nuclear Energy

Date: July 7, 1989